

Canada's Army and the Concept of Maneuver Warfare: The Legacy of the Twentieth Century (1899-1998)

**A Monograph
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Abstract

Canada's Army and the Concept of Maneuver Warfare: The Legacy of the Twentieth Century (1899-1998) by MAJOR Howard G. Coombs, Canadian Forces, 59 pages.

The Canadian Army currently espouses the ideas associated with Maneuver Warfare as doctrine. Unfortunately, the legacy of Canadian military in the twentieth century does not lend itself to the institutionalization of the mindset required to effect maneuver warfare, as delineated in the latest iteration of Canadian Army doctrine, contained in the capstone manual B-GL-300-000/FP-00 Canada's Army: We Stand on Guard for Thee (01 April 1998). This paper traces the factors that exemplify the manner in which the Canadian Army has operated during the last hundred years to demonstrate their effect on the operations of today and tomorrow. If the successes of our past are the foundation of our present operational and tactical methods we must understand these threads of continuity in order to either take advantage of or overcome our legacy in implementing doctrine.

The bulk of primary source research was limited to that which could be examined via the Internet, information that had been reproduced on compact disc and that which could be obtained via interlibrary loan. These means produced sufficient primary material available to enable research into this topic. In addition to these primary sources there was a plethora of secondary source materials, by prominent military historians. Sources were evaluated for objectivity, comprehensiveness and authenticity.

Canadian operational experience in peace and war over the last century has been characterized by: static warfare; attrition; lack of introspective thought; inadequate doctrine; centralized control and decentralized execution; rigid and uncompromising staff procedures as a result of a failure to develop and maintain an operationally capable general staff; and more recently, a neglect of warfighting due to the demands of peace support operations. The single thread of historical continuity throughout all experiences is a fixation with the limited objectives of the symmetrical battlefield. This more than any one thing is our legacy and in order to become true maneuverists at the operational level we must not only espouse the tenants of the latest doctrine, but also actively seek to remember the lessons of our past and avoid repeating them. It is necessary to rid ourselves of the historical fixation with the methodical battle and focus on how to develop commanders who can make decisions on the asymmetrical battlefield. The Canadian Land Forces could make these adjustments by integrating systemic changes in the domains of technology, command, organizations, doctrine, education and staff training. This will enable the Land Forces to meet the security requirements of Canada in the chaotic, asymmetrical, network centric environment of twenty-first century conflict.

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Senior German Commanders both in France and Italy were quoted after the war [World War II] to the effect that they always knew when the Canadians were in the line against them. The Canadians they said were the masters of the set-piece attack. They were almost assured of achieving their initial objectives by the highly coordinated employment of firepower, both direct and indirect. They were also completely predictable in their unwillingness to exploit these victories, thereby allowing the Germans to fall back to prepared positions and to repeat the deadly ballet all over again. This is our doctrinal heritage. Is this what we really want to hold on to? Do we really want to bleed our way to future victories because that is how we did it before?¹ *Lieutenant-Colonel (Ret.) Chuck Oliviero (1999)*

INTRODUCTION

The legacy of the Canadian Land Forces in the twentieth century is comparable to that of many western nations. A small, professional colonial army at the end of the nineteenth century, which provided the core of national mobilization in the First and Second World Wars, participated in the Korean War and has been fully engaged with peace keeping and peace enforcement operations since the 1950's. The Land Force has weathered the lean inter-war years of the 1920's and 30's, and expanded to fulfill national requirements during the Cold War. Throughout the last hundred years the conceptual doctrinal framework of the Land Forces has supposedly migrated from that of attrition to maneuver.² The current keystone manual of the April 1998, B-GL-300-000/FP-00 Canada's Army: We Stand on Guard for Thee, articulates a

¹ Lieutenant-Colonel (Retired) Chuck Oliviero, "Response to 'Doctrine and Canada's Army – Seduction by Foreign Dogma: Coming to Terms with Who We Are' by Lieutenant-Colonel Roman J. Jarymowycz, Vol. 2, No. 3, August 1999." Canada. National Defence. The Army Doctrine & Training Bulletin Canada's Professional Journal on Army Issues 2, no. 4 (Winter 1999): 141.

² Attrition warfare can be best expressed as "...a toe-to-toe slugging match in which each side assumes the other will abide by predictable rules and that sheer weight of numbers and material will determine the outcome" while maneuver is illustrated by the theories of John Boyd and the fighter pilot's OODA Loop (Observing, Orienting, Deciding, Acting). The pilot whom completes the cycle fastest normally and attacks the enemy while is still trying to complete his OODA Loop is the victor of the aerial engagement. By extension, maneuver warfare leads one to attack the enemy in areas that give his military cohesion vice fighting him force on force, and thus maneuver tactics concentrate on deception, unpredictability and surprise. James Fallows, National Defense (New York: Random House, 1981), 26-31.

key tenet of maneuver warfare, comprehension of the higher commanders intent, within a subsection entitled “Command Philosophy”:³

The principle of subsidiarity is to be applied. Subordinate commanders are to be given, to the greatest extent possible, the responsibility, information, and resources to act as the tactical situation demands, without further reference to higher authority. In effect subordinates are empowered to perform and respond to situations as their commander would have, had their commanders been there in person. To realize this command philosophy, leaders must know their subordinates intimately and trust them implicitly; subordinates in turn, must not only be skilled in the military art, but fully aware of their responsibilities to their commander and committed to fulfilling them⁴

This philosophy is predicated on a particular state of mind or manner of thinking rather than tactical or operational techniques and procedures.⁵ It is a warfighting philosophy that strives to defeat an adversary by destroying his source of moral, cybernetic or physical power.⁶ The endstate of the maneuverist warfighting approach is to negate the enemy’s ability to conduct warfare as a cohesive force.⁷

Proponents of the maneuverist approach believe the aim of warfare to be an attack on enemy systems. They visualize that the efforts of military forces be directed towards the creation, exploitation and enhancement of misdirection. Rapid short-lived maneuver will disorient, disrupt and strain enemy systems to the breaking point by attacking indirectly his centers of gravity.⁸

³ Michael Wyly believes the two key principles of maneuver warfare to be an understanding of the higher commander’s intent and that of the designation of the main effort or “Schwerpunkt”. Michael Duncan Wyly, “Teaching Maneuver Warfare,” in Maneuver Warfare: An Anthology, ed. Richard D. Hooker, Jr., with a forward by Gen. John R. Galvin, USA (Retired) (Novato, California: Presido Press, 1993), 257-8.

⁴ National Defence, B-GL-300-000/FP-00 Canada’s Army: We Stand on Guard for Thee, 01 April 1998, 86-7.

⁵ Lieutenant-Colonel Roman J. Jarymowycz, “Doctrine And Canada’s Army.” Canada. National Defence. The Army Doctrine & Training Bulletin Canada’s Professional Journal on Army Issues 2, no. 3 (August 1999): 50.

⁶ Dr. Joe Strange, “Centers Of Gravity & Critical Vulnerabilities: Building on the Clausewitzian Foundation So That We Can All Speak the Same Language,” Marine Corps University: Perspectives On Warfighting, No. 4, 2nd ed. (Quantico, Virginia: Defense Automated Printing Service Center, 1996), ix.

⁷ Oliviero, 140.

⁸ Robert B. Polk, “A Critique of the Boyd Theory – Is it Relevant to the Army?”, Defense Analysis 16, no. 3 (December 2000): 266.

The tempo of operations must be such that the enemy is forced to conform to our plans, to the point where he can no longer react in a coherent manner to our actions. Additionally, the concept of directive control is utilized to provide the basis of a philosophy of command.⁹

Directive control can be understood as command utilizing commanders' intent, mission analysis and designation of a main effort to promote rapid maneuver in the physical and conceptual sense.¹⁰ Effective implementation of this method is contingent upon decentralization of authority. In conjunction with awareness of the higher purpose of tasks¹¹ this permits subordinates to implement operations that use rapid tempo and synergistic effects to achieve decisive results.¹² The differences between command in attrition and maneuver warfare are simplistically depicted in Figure 1.¹³ It is my belief that the history of the Canadian Land Force in the twentieth century does not lend itself to the institutionalization of the mindset required to effect a maneuver type doctrine and related concepts such as that delineated in B-GL-300-000/FP-00 Canada's Army: We Stand On Guard For Thee. The experiences of the Boer

⁹ Captain Paul Johnston, "The Myth of Manoeuvre Warfare: Attrition in Military History," in The Changing Face of War, ed. Allan D. English (Montreal, Kingston, London and Buffalo: McGill-Queen's University Press, 1998), 27-8.

¹⁰ Captain Ian Hope, "Manoeuvre Warfare and Directive Control: The Basis for a New Canadian Military Doctrine Part 2 of 2," The Canadian Land Force Command and Staff College Quarterly Review 5, no.1/2 (Spring 1995): 10.

¹¹ Ibid., 10.

¹² Richard E. Simpkin, Race to the Swift: Thoughts on Twenty-First Century Warfare, with a forward by General Donn A. Starry, United States Army, Retired (London: Brassey's Defence Publishers, 1985; paperback reprint, 2000), 230.

¹³ Richard Simpkin describes these qualities as the parameters of command. Ibid., 229. Dr. James Schneider has further delineated the psychological domain of command as the ability of commanders to impose their will in order to carry an idea through the planning phase to successful execution while overcoming the inherent friction of combat. Schneider views the physical domain of war as the process of destruction of an army's ability to operate within the cybernetic and moral realms of conflict, thus disrupting the cohesion of the organisation. James J. Schneider, Theoretical Paper No.3: The Theory of Operational Art (Fort Leavenworth, Kansas: United States Army Command and General Staff College, 1988), 6-7.

War, World Wars I and II, Korea, the Cold War, peace support operations as well as the interludes between major conflicts have produced a mindset that is the natural result of the Canadian military experience during those years.

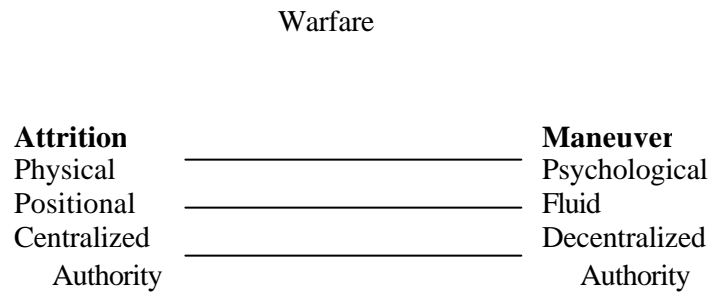


Figure 1 – Parameters of Command
 Richard E. Simpkin, Race to the Swift: Thoughts on Twenty-First Century Warfare.

This mindset has become institutionalized within the Land Forces. Thus the organizational change that is necessary to produce maneuver warfighters has not emerged. Instead we continue to rely on a symmetrical vision of the battlefield that has grown from our experiences in major conflicts: an understanding of conflict as an orderly and progressive series of engagements, battles, and campaigns that will result in victory. We have been unable to move from the lessons of our past to embrace the reality of the present – an asymmetric, chaotic environment where decisions are made under less than ideal circumstances with minimal time to “observe, orient, decide and act.”¹⁴

THE BOER WAR (1899 - 1901)

The Canadian Militia, as the Army was known, was a small force, prior to the Boer War.

¹⁴ Wyly, 254.

In 1887 the authorized strength of the Permanent Force was expanded to 1000 men and was sorely lacking in many aspects. Of an effective strength of 886 men in 1890: 345 were discharged; 152 deserted; 128 were pronounced guilty of various military offences by court-martial; and, 8 died. Additionally, approximately less than half of the Permanent Force had two years experience. The Active Militia was not much more effective. It was primarily a social and political organization with priorities other than training as an effective military force. The average drill strength was 18,871 men from 1876 – 1896 and it must be noted that of this figure there were 4 officers, Non-Commissioned Officers, buglers and bandsmen for every 9 privates.¹⁵

Canadian governments assuming that war with the United States was unlikely and war with any other military threat inconceivable therefore felt justified in allowing the militia to degenerate into little more than a fancy-dress party, and in rejecting occasional British blandishments to take part in the incessant colonial wars of the empire.¹⁶

Canada did not have the professional framework of a developed military, even the Royal Military College, founded in Kingston, Ontario in 1876, supplied the bulk of its graduates to the British Army.¹⁷ Canada's army was a force designed and used to provide internal security. The Riel Rebellion of 1885 and the policing activities of the Yukon Gold Rush in 1898 typified the military activities of this pre-Boer War period. Doctrine and training mirrored that of the British Army with its rigid adherence to discipline and drills.

In 1899 the Boer Republics of South Africa, Transvaal and the Orange Free State, declared war on the British Empire. At the onset of war the Canadian government offered to contribute an infantry battalion of 1000 officers and men. The recruits for this expeditionary force came from across the Dominion and the structure of this force was based on the existing Permanent Force.¹⁸ On October 30th 1899 the 1061 men of the 2nd (Special Service) Battalion

¹⁵ Gwynne Dyer and Tina Viljoen, The Defence of Canada: In the Arms of the Empire 1760-1939 (Toronto: McClelland & Stewart, Inc., 1990), 146-8.

¹⁶ Ibid., 148.

¹⁷ Ibid., 147.

¹⁸ Warrant Officer Ross A. Appleton, The Battle of Paardeberg (South African War) (Unpublished essay.

sailed from Quebec City to join British Forces in South Africa.¹⁹ The Canadians arrived in November and until early February spent many hours occupied with drill to achieve an acceptable level of training and fitness. Patrolling, outpost duty, fire and movement were taught by British trained officers. Stringent discipline was practiced at all times.²⁰

For the Canadians, minor raids and combats with a few larger scale set-piece battles, notably the Battle of Paardeberg on February 27th 1900, characterized the campaigns of the Boer War. Of the eight companies of the 2nd (Special Service) Battalion that had sailed for South Africa, six companies refused to extend their service past the end of their contract in September 1900 and returned to Canada.²¹ However, other Canadian contingents continued to arrive and fought until the War's end.

For the nation, Canadian participation in the Boer War marked the first dispatch of troops to an overseas conflict and the nascent development of a national identity. Conversely, the military became more tied to England. Serving under British commanders and utilizing their tactics, techniques and procedures during the Boer War assisted in binding the fledgling Canadian military to that of the British, with its attendant rigid discipline and control. No Canadian commanders had the opportunity to develop experience in the operational level of war during that conflict and thus did not become familiar with the operational art nor the tactical maneuver of formations.²²

Petawawa, Ontario: 1st Battalion, The Royal Canadian Regiment, 1999), 1-2.

¹⁹ Dyer and Viljoen, 163-4.

²⁰ Appleton, 3-4.

²¹ Dyer and Viljoen, 170.

²² Although Canadians were not well placed to practice the maneuver type warfare at the operational level, there was an excellent example of maneuverist thought by the British commander, Field Marshall Lord Roberts, mentioned in the Regimental history of The Royal Canadian Regiment. Lord Roberts identified the Boer Center of Gravity to be their mobility and on February 5th 1900 issued a memorandum for the instruction of all field commanders with guidance on the method of attacking that Center of Gravity. R.C. Fetherstonough, The Royal Canadian Regiment: 1883-1931 (Montreal: Gazette Printing Co., 1936; reprint Fredericton, New Brunswick: Centennial Print & Litho Ltd., 1981), 103-4.

PRELUDE TO WORLD WAR I (1902 - 1913)

There were no calls for Canada to earmark forces for overseas service, just a great deal of detailed work by the soldiers on the 'standardization' of uniforms, weapons and training throughout the armed forces of the empire.²³

After the Boer War the army of Canada returned to its pre-South African state: the priority for defense being internal security as it was felt the Monroe Doctrine would cause the United States to protect Canada from any outside attack.²⁴ However, between 1902 and 1904 the Department of Defense was reorganized under a British officer, Major General Douglas Dundonald, Earl of Dundonald. There was a general departmental restructuring of stores and engineering branches from civil to military control. An intelligence branch was formed. Modern administrative practices, such as a Central Registry, replaced numerous separate registries. The Militia acquired training areas and ranges. As well, new drill books were procured for infantry and cavalry. Amendments to the Militia Pension Act and the utilization of the Royal Military College to obtain officers improved the Permanent Forces or as they were known, the Permanent Active Militia.²⁵ Some of this reform was directly attributable to Lord Dundonald, while some was in response to British reorganization stemming from lessons learned during the South African conflict.²⁶

Between 1902 and 1911 several Colonial or Imperial Conferences met to cement military cooperation between Britain and the Dominions. In 1907 a resolution was passed proposing a central staff of the Imperial General Staff to coordinate with, and advise, dominion forces through

²³ This followed the Imperial Defence Conference of 1909 in a effort to combine all the forces of the Empire into one army. Dyer and Viljoen, 177-8.

²⁴ Ibid., 175.

²⁵ George F.G. Stanley, Canada's Soldiers 1604-1954: The Military History Of An Unmilitary People. (Toronto: McClelland and Stewart, Inc., 1996), 297.

²⁶ John A. English, Lament For An Army: The Decline of Military Professionalism (Contemporary Affairs Number 3. Concord, Ontario: Irwin Publishing, 1998), 11.

local sections of the Imperial General Staff in the dominions.²⁷ The “Imperial Defence Conference” of 1909 resulted in a commitment to standardization amongst British and Dominion forces that:

...meant the Canadian soldier would lose to some extent, not only his distinctive character, but the means of developing those types of warfare for which he was especially suited by climate and geography. Winter training, cold weather equipment, mountain fighting, forest warfare, all of these could and should have been the special possession of the Canadian militiaman as they had been in the days of the Ancien Regime. They were all ignored, for the policy of standardization had one aim, that of making the Canadian militiaman into a replica of the British Territorial Tommy in arms, training, equipment, and habits of thought.²⁸

This replication of the British system also occurred at the staff level and from 1903 onwards Canada sent selected officers to the British Army Staff College at Camberley and as a result of the 1911 Imperial Conference four could attend each course. The Militia List of spring 1914 indicates only eight serving officers were graduates and another four were in the process of completing the training.²⁹ In 1908 Canada instituted a militia staff course to train members of the reserve militia in administration and general staff duties. This course was modeled on elements of the existing British staff course. At the commencement of World War One there were 124 graduates of this training.³⁰

Debate over the size of the army was characterized by the view that the Militia was primarily an instrument of internal security. The prevailing attitudes ensured the Militia was used to provide support to the civil authorities. Such support was provided during labor difficulties at: Sydney Mines in 1905; Winnipeg, Kingston, Buckingham and Hamilton in 1906, and, again, Sydney Mines in 1909.³¹ In this environment there is no evidence of a great deal of thought

²⁷ Stanley, 302-3.

²⁸ Ibid., 304.

²⁹ C.P. Stacey, “The Staff Officer: A Footnote to Canadian Military History,” Canadian Doctrine Quarterly 3, No. 3 (Winter 1973/74): 46.

³⁰ English, Lament For An Army, 12-3.

³¹ Stanley, 291-5.

expended on doctrinal issues. That was supplied verbatim by Britain and the size of the military precluded much thought being given to those issues. Indeed in 1913 it was the first opportunity for about three quarters of the 74,000 in the militia to receive a few weeks training in summer camp.³²

WORLD WAR ONE (1914 - 1918)

On observing the disembarkation of the Canadian Expeditionary Force (CEF) in Britain in October 1914, the future British military reformer J.F.C. Fuller caustically remarked that Canadian soldiers would be good enough after six months training if the 'officers could be shot'.³³

Mobilization of Canadian Soldiers for World War One was characterized by confusion and amateurishness. Meticulously planned mobilization plans were disregarded and the Minister of Militia and Defence, Sam Hughes, improvised a new mobilization scheme. He disregarded the existing militia units as the structure for creating the Canadian Expeditionary Force and formed the volunteers who came forward into numbered battalions bearing no relation to the forces then in existence.³⁴ From the resultant chaos eventually emerged the Canadian Corps, which matured into the shock force of the empire.

Much of the operational ability of the Canadian Corps has been attributed to the skill of attached British staff officers.³⁵ Historian Lieutenant-Colonel (Retired) John English has postulated that:

Much of the operational effectiveness of the Canadian Corps sprang from the skill of its high-quality British staff officers, three of whom rose to become Chief of the Imperial General Staff (CIGS). In a highly positional war that left little room for strategic maneuver, tactical innovation through meticulous staff work was critical.³⁶

³² Dyer and Viljoen, 200.

³³ English, Lament For An Army, 14.

³⁴ Stanley, 310-1.

³⁵ English, Lament For An Army, 16.

³⁶ John A. English, Failure in High Command: The Canadian Army and the Normandy Campaign, with a forward by Gunther E. Rothenberg (New York: Praeger, 1991; Ottawa: The Golden Dog Press, 1995), 16.

English believes the success of the Canadian Corps was predicated on meticulous planning, training and preparations rather than any innate superiority derived from not having the cultural limitations of peacetime military structures. This passion for extremely detailed staff planning, preparations and training became ingrained and is mentioned in documentation of the period:

A glance at the piles of written papers on the chief's [divisional Chief of Staff] desk helps one to realise something of the immense preparations for even one [2000 man] raid. The general idea is first obtained, and is worked out on paper to the minutest details. Every battery, every company, every man is given his exact orders. Each gun section has its written directions telling when it is to fire, and what it is to fire. Each platoon commander knows where he is to be, how he is to move, and where each of his men is to go. Provision is made for everything...

For weeks aerial observers, sky photographers, O-pip officers, scouts in No Man's Land, have worked for this, accumulating facts, studying the enemy lines. The staffs had to think not only what our men can do, but what the enemy may do in reply...³⁷

The capture of Vimy Ridge on April 9th 1916 demonstrated Canadian prowess as masters of the set piece battle.³⁸ This engagement marked the coming of age of the nation. It was the first exclusively Canadian triumph. The four divisions of the Canadian Corps under the leadership of a Canadian commander, Lieutenant-General Sir Arthur Currie, as a cohesive formation, planned, coordinated, trained and completed a successful major operation³⁹.

The battle of Vimy Ridge was a great triumph for Canada. Our casualties were substantial. But our gain was great. Our prisoners alone numbered 3,342, including sixty-two officers. The guns taken numbered thirty. We had secured the key of one of the most important sections of the north.⁴⁰

³⁷ F.A. McKenzie, Canada's Day Of Glory (Toronto: William Briggs, 1918), 39.

³⁸ McKenzie provides a detailed account of the battle, phase by phase. However, to provide a grosso modo idea of the set-piece nature of the concept of operations it is worth repeating his description on page 72, "The coming advance was divided into four stages. Four imaginary lines were drawn: Black, red, blue, and brown. The first attacking parties were to go through to the Black line, following their barrage... Then a second party were to go through the first and attack the Red line, a third through the second for the Blue, and so on to the final assault on the Brown line. Every step was exactly timed." The battle was completed as rehearsed with each objective being attained before commencement of the next stage. McKenzie, 72-86.

³⁹ According to Stanley, Field Marshal Smuts commented Currie possessed, "...a high sense of the practical, a firm grasp of detail and a real capacity for administration. He could recognize ability in others and was not afraid to attract to his staff talented, even eccentric officers, whose ideas he could translate into reality." Stanley, 312.

⁴⁰ McKenzie, 86.

This was not the only operational triumph of the Canadian Corps in the First World War, August to November of 1918 marked the transition of the nature of the conflict from a static, attritionist genre to a war of movement, of maneuver. The Canadian participants recognized the fundamental nature of this change in the summer of 1918:

We still used trenches, and it would be a mistake to talk of trenches as obsolete. Fresh trenches had been dug along our new lines. But the trench was no longer the dominating feature of the situation. War was to become what soldiers had long hoped for – open war, where armies fought and moved and cavalry came into play again, where the initiative of the individual soldier obtained full opportunity and generalship could show itself in other ways than the building up of cumbersome defences.⁴¹

The German Army also recognized the transitions and gave up key terrain grudgingly, using all the skills of four years of war to delay and defend against an advancing Canadian enemy.⁴² The German Army viewed each significant feature as a potential decisive point that could unhinge their defense. This accordingly impacted on Canadian operational maneuver. By November 1918 the Corps Headquarters had become casualty adverse. Orders were issued “...that heavy casualties must not be incurred in the operations the Corps was conducting...”⁴³ This direction made subordinates cautious and assisted in causing maneuver to become structured even phased, as at Vimy.

The defining event of the First World War for the Canadian nation was the capture of Vimy Ridge. It is said that Canada came of age that day and it has created a proud heritage that endures to this moment. The legacy of Vimy has indeed, also endured for the Canadian Army, detailed, directive staff work⁴⁴ and orders, top down hierarchical control, and an enemy/terrain

⁴¹ Ibid., 201,

⁴² Fetherstonhaugh, 351.

⁴³ Ibid., 373.

⁴⁴ This is not to suggest that by itself staff coordination and planning are inherently counterproductive. However in a military culture that emphasizes control it exacerbates the problem of discouraging initiative.

orientation for operations, leaving little leeway for initiative.⁴⁵ Despite some maneuverist thought that occurred at the tactical level, success became defined by strict control of operations, the set-piece battle. This vision of success has become a thread of continuity linking our warfighting experiences of the twentieth century.⁴⁶

THE INTER-WAR PERIOD (1919 - 1938)

It is almost national tradition in Canada that active participation in a war should be followed by a rapid decline in the efficiency of the defence forces. Many of those who had fought in France during the First World War were anxious to forget the horrors and the hardships of war; others believed that the organization of an international society the League of Nations, had rendered the maintenance of defence forces unnecessary.⁴⁷

In the race to resume the normalcy of peace the operational lessons learned by the Canadian Corps were never captured formally. In particular the maneuver of the last months of 1918 utilizing combined arms tactics was overshadowed by the memories of the attritionist struggles of the preceding years. There was a rush to forget. John English makes the pithy comment that, “It was left to the German General Staff to study the lessons of the Battle of Amiens and the hundred days that followed.”⁴⁸

In 1919 the Otter Committee was convened under the guidance of the elderly Major-General William Otter, who had commanded the 2nd (Special Service) Battalion during the Boer War. This commission was instituted to determine the structure of the post-World War One Army, perhaps using the units of the Canadian Expeditionary Force as a structure. Instead it accomplished little other than a return to the pre-war status quo, where the Militia (Permanent

⁴⁵ William McAndrew, “Operational Art and the Canadian Army’s Way of War,” in The Operational Art: Development in the Theories of War, eds. B.J.C. McKercher and Michael A. Hennessy (Westport, Connecticut: Praeger Publishers, 1996), 91.

⁴⁶ An example of commander’s intent at the battalion level from the Somme January 22nd 1917, “Intention: The Battalion will carry out a small raid north of Watling Crater [exact map locations given] with the object of capturing prisoners, obtaining identification of the enemy unit next to us, and inflicting casualties.” Featherstonhaugh, 262-3.

⁴⁷ Stanley, 326.

⁴⁸ English, Lament For An Army, 19-20.

Force and Reserve) was primarily a social institution.⁴⁹ The primary role of the ground forces in Canada, once again, became internal security and elements were promptly dispatched to suppress the Winnipeg General Strike of 1919, in Manitoba.⁵⁰ This pattern of aid to the civil power was to be repeated at Quebec City in 1921, Cape Breton, Nova Scotia in 1922 – 23, Oshawa and St-Catherine's, Ontario in 1932 and Stratford, Ontario in 1933.⁵¹ By 1925 the Permanent Force was 4125 all ranks and the reserve militia was smaller than pre-war.⁵² Service survival became the overriding focus of the Army at the expense of introspection on their profession.⁵³ Once again British doctrine was adopted verbatim as the Canadian model⁵⁴ with the attendant weaknesses that had demonstrated themselves during World War One: rigid staff work; minimum encouragement of initiative or decentralization of authority; and a tendency to avoid risk.⁵⁵

Further contributing to this erosion of the operational maneuver learned at great expense just a few years previously was the interwar reason for being of the Canadian Army. From 1929 – 1936 the focus was on non-operational activities. Besides the aid to the civil authority tasks previously mentioned, there was involvement with the administration of relief camps from 1932 – 1936. Northern communications and aerial mapping also distracted the military from operational training and doctrinal development.⁵⁶

⁴⁹ Ibid., 20.

⁵⁰ Desmond Morton, A Military History of Canada (Edmonton: Hurtig Publishers Ltd., 1990), 122.

⁵¹ Dyer and Viljoen, 322.

⁵² Ibid., 321.

⁵³ English, Lament For An Army, 20.

⁵⁴ The prevailing view was that if a conflict occurred that the Canadian military would fight alongside British forces and thus required interoperability. R.H. Roy, "The Canadian Military Tradition", in The Canadian Military: A Profile, ed. Hector J. Massey (Canada: The Copp Clark Publishing Company, 1972), 39.

⁵⁵ J.L. Granatstein, The Generals: The Canadian Army's Senior Commanders In The Second World War (Toronto: Stoddart Publishing Co. Limited, 1993), 259.

⁵⁶ English, Lament For An Army, 21.

Although collective training at even the unit level was extremely difficult due to the overwhelming number of non-operational tasks, as well as the requirement to train the reserve militia⁵⁷, some intellectual debate was evident in the pages of the Army's professional journal, Canadian Defence Quarterly, during the 1930s.⁵⁸ One such example was a lively debate, which took place between Captain G.G. Simons (later a General and Chief of Staff of the Canadian Army) and Lieutenant-Colonel E.L.M. Burns (later a Lieutenant-General) as to the correct balance of tanks and infantry in a division as to achieve flexibility and interoperability.⁵⁹ Canadian Defence Quarterly was an especially significant journal, as no Canadian Staff College existed at that time. Vacancies for Canadian officers to attend British Staff Colleges were limited to three per year at Camberly and one per year at Quetta.⁶⁰ Many Canadian officers, however, were not interested in either Staff College or the Imperial Defence College, as they had other pursuits to occupy their time and there was debate on the value of this higher professional training. The staff course was viewed by some as primarily social in nature or not worthy of the effort it took to be selected. Nevertheless, more than half the Permanent Force officers who rose to general rank during the Second World War attended Camberly or Quetta.⁶¹ In addition to the two year Staff College for a limited number of Permanent Force Officers, there was from 1922 onwards a Militia Staff Course for the reserve militia and from 1935 an Advanced Militia Staff

⁵⁷ Stanley, 328.

⁵⁸ Granatstein, The Generals, 260.

⁵⁹ Major Jamie W. Hammond, "The Pen Before the Sword: Thinking About 'Mechanization' Between The Wars" Canada, National Defence, Canadian Military Journal 1, no. 2 (Summer 2000), 102-3.

⁶⁰ Ibid., 99.

⁶¹ The Staff Colleges were two-year courses whose curriculums included brigade to corps staff work in order to produce officers capable of serving as general staff officers in those formations. Other areas of training were joint operations and imperial policing. The Imperial Defence College focused on strategic issues and only 13 officers graduated before World War Two. Selection for Staff College was quite rigorous with applicants attending a five-month preparatory course at Royal Military College and writing a set of comprehensive examinations. Granatstein, The Generals, 14-7.

Course, both greatly abbreviated when compared to the British model but sufficient to produce a large number of partially qualified staff officers prior to World War Two.⁶² By 1939 the Militia Staff Course had produced 400 graduates, the Advanced Militia Staff Course had graduated 29 officers, in addition to the 45 Permanent Force officers who had graduated Camberly and Quetta.⁶³

In 1938 the Permanent Force held its first Regimental level exercise since the end of World War One. Indeed it was the first time many officers who had enrolled after 1918 had seen 1000 soldiers on parade.⁶⁴ This training deficiency was evident throughout the maneuvers:

We were sadly lacking in field experience as a battalion...We had become hopelessly bureaucratic and it was deemed impossible for a battalion to perform even the simplest operation without issuing a four-page written order to at least forty addresses. As an Adjutant I recall the tension created by my desire to have everything brief and verbal and my Commanding Officer's determination to commit everything to writing.⁶⁵

The military was under funded, under equipped and undermanned and focused on tasks than warfighting, thus providing commanders no opportunity to command large formations under field conditions.⁶⁶ In conjunction with the lack of professional staff training, the failure to formulate doctrine and the failure to remember and study the lessons of World War One (formation operations; the role of machine guns and armor; and the need for mechanization) resulted in an army poorly prepared to undertake the challenges of mechanized all arms combat.⁶⁷ Unfortunately the climate of the period did not produce innovative maneuverist type thought.

⁶² Ibid., 24-6.

⁶³ English goes on to say that the militia staff course graduates were qualified to do little more than garrison duties and actually added little value to the formation staffs of the Canadian Army during the Second World War. English, Failure in High Command, 98.

⁶⁴ Ibid., 20.

⁶⁵ G.R. Stevens, OBE, LL.D. The Royal Canadian Regiment: 1933-1966 (London, Ontario: London Printing & Lithographing Co., Limited, 1967), 11.

⁶⁶ William McAndrew, "Operational Art and the Canadian Army's Way of War," 89.

⁶⁷ English, Lament For An Army, 20.

WORLD WAR TWO (1939 - 1945)

Of all the traditions Canada has inherited in the military field none, is more persistent than public neglect and indifference to national defence, until face to face with an emergency, well expressed by Rudyard Kipling's lines on 'Tommy Atkins' – 'It's Tommy this and Tommy that and kick him out the brute; but it's thank-you very much Mr. Aitkins when the guns begin to shoot.' And as a corollary when an emergency does come, the general public believes that the citizen recruited from the street can be turned into an effective fighting man at the wave of a wand. The public mind seems incapable of grasping the fact that military business is a highly skilled profession.⁶⁸

On March 31st 1939 the Permanent Force was 4169, of which 446 were officers, and the Non Permanent Active Militia was 51,400, of which 6373 were officers.⁶⁹ After Germany invaded Poland on September 1st 1939 the Canadian Government followed Britain and declared war on September 10th. The 1st Canadian Division arrived in Britain in December. Major-General A.G.L. McNaughton, a veteran of World War One, was the commander. Force mobilization, unlike the previous war, was based on existing units of the Permanent Force and Non Permanent Active Militia. By 1942 there was five divisions, three infantry and two armor, organized as the First Canadian Army under command of Lieutenant-General McNaughton. By the end of the war the Canadian Army was an Army Headquarters, two Corps headquarters, three infantry divisions, two armor divisions, two independent armor brigades, and ancillary units.⁷⁰

Canadians first saw action at the Dieppe Raid of August 19th 1942, which involved two brigades supported by navel and air elements conducting a raid of the town of Dieppe. It was not successful, but captured lessons for the future invasion of France. No opportunity was given to maneuver until July 1943, with the commencement of the Italian Campaign. This force grew to Corps size (1st Canadian Corps) and took part in the Liri Valley offensive that resulted in the

⁶⁸ Lieutenant-General G.G. Simmonds, "Commentary and Observations", in The Canadian Military: A Profile, ed. Hector J. Massey (Canada: The Copp Clark Publishing Company, 1972), 289.

⁶⁹ Granatstein, The Generals, 8.

⁷⁰ The term "Canadian Army" replaced the outmoded term "Militia" in the Autumn of 1940. Colonel C.P. Stacy, OBE, "The Development of the Canadian Army: Part IV: The Modern Army, 1919-1952," Canadian Army Journal 6, no. 4 (September 1952) [database on CD]; available from Canadian Forces Army Lessons Learned Centre, Information Warehouse (LLIW/DDLR), Version 6.0 (April 1998).

capture of Rome and the breaching of the Gothic line that led to the capture of Rimini and Ravenna by the Autumn of 1944. In early 1945, the bulk of the 1st Canadian Corps moved to North West Europe and was commanded by General H.D. Crerar during the next eleven months of fighting. The remainder of the Canadian Army participated in the Normandy campaign and breakout; the Falaise Gap; Scheldt Estuary; the crossing of the Rhine; and North West Germany until the war ended on May 5th 1945.⁷¹

The neglect of the inter-war period influenced the Canadian Army adversely in the early years of the war. Senior commanders in the beginning were for the most part officers who had served in World War One. Many failed to succeed in utilizing the new methods of warfare or demonstrated an insufficient grasp of command at formation level and were replaced before 1943, many by militia officers who had quickly adapted to the new realities of modern war.⁷² In 1942 Field Marshall Bernard Montgomery assessed the abilities of formation commanders of the Canadian Corps as weak in “the stage management of battle operations, and in the technique of battle fighting generally” and he further went on to state that the deficiencies of brigade commanders could not be rectified “unless the Division Commanders are themselves competent to train their subordinates, and are themselves conversant with the handling of a Division.”⁷³ In the same vein Montgomery also said that the training of division commanders had failed to progress at the same rate as that of lower levels.⁷⁴ This lack of familiarity with operational maneuver and the operational art was evidenced by General McNaughten’s difficulties during Exercise SPARTAN, a Corps level field training exercise held in England during March 1943. His evident inability to effectively command a corps and visualize operations beyond a few hours

⁷¹ Ibid.

⁷² Roy, 43.

⁷³ Granatstein, The Generals, 31.

⁷⁴ Ibid., 31.

was evident to all. McNaughten returned to Canada in December 1943.⁷⁵ In effect the neglect of the interwar years resulted in the loss of a group of senior leaders who should have become proficient in their profession during the interwar years.⁷⁶

Greatly accelerated wartime staff training at Camberly attempted to remedy the lack of qualified staff officers. Starting in September 1939 the Staff College conducted 17-week junior staff courses for 100 students at a time. Canadians received only a small portion of these vacancies. As a result the Canadians established their own three-month Canadian Junior War Staff Course in England, commencing in the Fall of 1940. Of the 59 who completed the first course only 36 received the staff qualification, seven obtained conditional passes and 16 failed. Modification to the assessment standard ensured a higher level of success during the second course. This course was later renamed the Canadian War Staff Course and divided into junior (garrison staff) and intermediate (formation staff).⁷⁷ John English hypothesizes that these courses could only be considered military education in the superficial sense of the phrase and they were more concerned with imparting doctrine than “considering the conduct of operations objectively”⁷⁸

English also believes the dearth of qualified staff officers in the inter-war period had an adverse effect on the Canadian Army’s performance during the Second World War, as qualified staff officers permit an army to train for war during peace, and once war commences there is rarely time to train field staff officers.⁷⁹ Command and staff problems that tend to support this hypothesis were noted in the Liri Valley Campaign:

⁷⁵ English, Lament For An Army, 33-34.

⁷⁶ *Ibid.*, 37.

⁷⁷ English, Failure in High Command, 99-100.

⁷⁸ *Ibid.*, 100.

⁷⁹ *Ibid.*, 101-2.

The conduct of this battle by the Canadian Corps confirmed General Alexander's belief that a division of infantry and a division of armour constituted an unwieldy battle instrument. In addition he decided that in view of its performance in the Liri battle he could not accept the responsibility of placing British or other allied divisions under Canadian command in subsequent operations. Many senior officers deemed this a slur on the quality of the Canadian soldier. It was nothing of the sort; it merely recognized the axiom the larger the formation the greater its problems of management. General Leese suggested the Corps be broken up or a new commander appointed.⁸⁰

It has been noted that General Bernard Montgomery was aware of these staff deficiencies within his subordinate formations and attempted to compensate for them throughout the war. He adopted a philosophy that in order to maximize the efficiency of inexperienced and minimally trained staff offices he directed that plans be kept simple and were characterized by the largest amount of preparations possible prior to the battle. In keeping with these limitations Montgomery did not expect his subordinates to implement any imaginative or bold actions while conducting operations.⁸¹

This deficiency impacted on the performance of the Canadian Army. Maneuver was slow and cautious, normally terrain oriented. The Falaise Gap, OPERATION TOTALIZE, demonstrated the difficulties the Canadians had in maneuvering to attack smaller German forces. The Germans took advantage of the Canadians inability to effect swift maneuver and withdrew many of their forces before the encirclement could be closed at Falaise. Historian Bill McAndrew noted that amongst the reasons for failure in Northwest Europe during this period were unwieldy staff procedures which restricted the ability to request and effectively use close air support, formation commanders inexperienced in the use of combined arms and command and staff methods that made formation maneuver contingent upon the ranges of the supporting artillery, thus limiting any initiative of the tactical commanders.⁸²

⁸⁰ This decision was held in abeyance and the Corps' operational performance later improved in North West Europe. Stevens, 140-1.

⁸¹ Richard H. Kohn, ed. "The Scholarship on World War II: Its Present Condition and Future Possibilities," The Journal of Military History 55, no.3 (July 1991): 379.

⁸² Bill McAndrew, "Operational Art And The Northwest European Theatre of War, 1944," Canadian Defence Quarterly 21, no. 1 (August 1991): 23-4.

The Canadian Army expanded rapidly at the beginning of World War Two and experienced problems that impacted negatively on its operational performance. A failure to remember the lessons of World War One; deficiencies of doctrine; a lack of properly qualified staff officers; and at the opening stages of the war unskilled senior commanders. All these factors combined, at the operational level, to create a Canadian way of war characterized by “staff-driven and top-down control”, with offensive operations characterized by movement akin to a “slinky-toy”, immense artillery preparation and objective oriented.⁸³ Bill McAndrew indicates that the Canadian fixation with the methodical battle produced a vision of war encouraging “Selection and maintenance of the plan, not the aim, being the guiding principle...”⁸⁴

THE BEGINNING OF THE COLD WAR (1946 - 1949) AND KOREA (1950 - 1953)

Canada did not rush to reduce her forces after World War Two and assumed commitments abroad in the form of collective defense. This was evident in support and participation in the North Atlantic Treaty Organization (NATO) in 1949, as well as the commitment to the United Nations (UN) starting in 1945. The Army was fixed at 25,000 men in 1946, which enabled the maintenance of a quick reaction force of a brigade group (brigade task force) in order to respond to these commitments. The Army was able to also provide for headquarters, training establishments and personnel to assist with the Reserve Force (the former Non-Permanent Active Militia). The Reserves were based on six divisions; four armor brigades and various corps and army units for a mobilized army of two corps and home defense units.⁸⁵ The country was partitioned into five regional commands, with subordinate areas for

⁸³ Granatstein, The Generals, 264.

⁸⁴ William McAndrew, “Operational Art and the Canadian Army’s Way of War,” 92-3.

⁸⁵ Brigadier Teddy Leslie of the Canadian Army was quoted as saying that deployment plans based on reserves, bred caution in operations due to fear of casualties. John Hasek, The Disarming Of Canada (Toronto: Key Porter Books Limited, 1987): 135.

administration. These five regional command headquarters could serve as division headquarters in an emergency. Military budgets that had declined immediately after the end of the war began to rise again in 1947-1948 in the face of international tension.⁸⁶ In the words of Canadian military historian Colonel C.P. Stacey:

A people who traditionally been very unwilling to do much in the way of military preparation in time of peace had clearly learned a great deal from the hard experience of two World Wars.⁸⁷

Staff training continued from the end of war, and in 1948 a National Defence College with the purpose of providing strategic-level professional education opened at Fort Frontenac, Kingston, Ontario.⁸⁸ However, the doctrinal flaws of World War Two were perpetuated. In 1947, when writing in the Canadian Army Journal about command and control during the maneuver of a division, Major-General Christopher Vokes proposed that any attempt to change the plan once orders were given to an infantry battalion would not be successful.⁸⁹ This lack of flexibility definitely did not inculcate the mindset required for maneuver.

Upon outbreak of war in Korea in 1950, Canada committed the 25th Infantry Brigade Group, under command of Brigadier J.M. Rockingham, a former brigade commander from the Second World War. This brigade became part of the 1st Commonwealth Division and took part in operations to eliminate the salient at the Imjin River in September and October of 1951. From October 1951 until the armistice in July 1953 the war became static and characterized by

⁸⁶ Stacey, "The Development of the Canadian Army: Part IV: The Modern Army, 1919-1952."

⁸⁷ Ibid.

⁸⁸ Stanley, 362-3.

⁸⁹ Major-General Christopher Vokes, "Tactical Manoeuvre Infantry and Army", Canada, Department of National Defence, Canadian Army Journal 1, no. 1 (1947) [database on CD]; available from Canadian Forces Army Lessons Learned Centre, Information Warehouse (LLIW/DDLR), Version 6.0 (April 1998).

defensive actions and offensive patrolling.⁹⁰ In fact, the nature of operations in Korea became very similar to those of World War One prior to August of 1918.

The recurrent retreats and advances had ended and manoeuvres now were restricted to a stabilized battlefield. The Chinese tacitly admitted that they lacked the strength to destroy the United Nations forces; the western allies in turn confessed that they sought not a victory at arms but a peace agreement by negotiation. Both sides resorted to prestige operations - local attacks and advances, harassing tactics, the recovery and surrender of a particular piece of ground.⁹¹

The desire to mount operations against the enemy resulted in an active patrolling policy. However the objective of many of these fighting patrols became the seizure of enemy prisoners vice the conduct of small scale offensive raids and ambushes against a static enemy. Thus these patrols proceeded with caution and firepower in order to gain access to an enemy position, secure prisoners and withdraw to friendly lines. Patrolling became marked by a tendency to be conducted as methodical battles on a smaller scale.⁹² Once again the conduct of operations was characterized by, detailed planning and preparations, firepower and initiative was limited to that movement which could be carried out within range of direct and indirect supporting fires.

There is no evidence that the Canadian Army's perspective of operational level maneuver had changed from the end of the Second World War. If anything the post -1945 experience enabled the restrictive factors that existed during the war to become more firmly entrenched. The positional warfare of Korea was a return to the attritionist warfare of World War One and was the last Canadian Army institutional memory of sustained conflict in the twentieth century.

THE COLD WAR (1948 - 1993)

In 1948 in response to the Communist party takeover of Czechoslovakia mutual security

⁹⁰ The principle of rotation for those serving in Korea was that no one would serve longer than one year. By war's end over 22,000 Canadians had served under UN command in Korea and Japan. Stanley, 374-375.

⁹¹ Stevens, 227.

⁹² Christopher Doary, " 'Minature Set - Piece Battles' Infantry Patrolling Operations in Korea May-June 1952," Canadian Military History 6, no.1 (Spring 1997): 28-30.

discussions began amongst the United States, Britain and Canada. The Soviet Blockade of Berlin gave impetus to the signing of a military mutual assistance treaty on April 4th 1949. The original signatories were: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Britain and the United States. NATO was the natural outgrowth of this military mutual assistance treaty. As a result of the onset of the Korean War, in June 1950, the NATO signatories decided to form a combined military force under command of General Dwight D. Eisenhower, as the first Supreme Allied Commander in Europe (SACUER). By 1951 Canadians were once again deployed to Europe.⁹³

The task of the NATO land forces was to impose an effective delay with forward deployed forces to permit the NATO allies' time to deploy reinforcements to the theater of operations in order to defeat Soviet aggression. The Canadian 27 Brigade, later 1 Canadian Infantry Brigade Group (CIBG), was responsible, as a member of I (BR) Corps, to impose delay in an assigned sector to the Rhine and defending at that point.⁹⁴ Canada's staff and doctrinal focus remained achieving interoperability with the British Army.⁹⁵ However, there were indications in the Canadian Army Journal from the late 1950s onward that this outlook started to shift, as the preponderance of articles on doctrine, tactics, techniques and procedures started to move from a preponderance of British sources to more articles from American origins. This trend continued in the succeeding years until the majority of articles in the 1960s were reproduced from United States military journals. I believe, this shift produced an uneasy mixture of doctrines that,

⁹³ About 10,000 were based in West Germany and France. In the early years Canada's NATO commitment was an infantry brigade group of 6670, an air division of 12 squadrons (up to 300 aircraft), approximately 40 warships, and reinforcements in time of war. Dean L. Oliver, Dispatches, Issue 9: Canada and NATO [paper on-line]; available from http://www.warmuseum.ca/cwm/disp/dis009_e.html, internet, accessed February 22, 2001.

⁹⁴ Sean M. Maloney, War Without Battles: Canada's NATO Brigade In Germany 1951-1993, with a forward by General Sir John Hackett (Whitby, Ontario: McGraw-Hill Ryerson Limited, 1997): 491-2.

⁹⁵ *Ibid.*, 27.

through accepted practice, became de facto “Canadian doctrine”. This endured until the publication B-GL-300-000/FP-00 Canada’s Army: We Stand on Guard for Thee in April 1998.

In the midst of doctrinal confusion and NATO, operational plans for forward defense shaped concepts of maneuver, by forcing the formulation of defensive strategies based on holding terrain regardless of losses until reinforcements could arrive. Introduced into this atmosphere was the concept of homeland defense, which was referred to as national survival. National survival exercises were oriented to re-entry and rescue operations into a nuclear devastated domestic environment using forces organized as mobile support columns. As a result the focus of the Canadian Army became NATO forward defense and homeland defense.⁹⁶ There was little to encourage introspection vis-à-vis maneuver. The 1964 White Paper, which listed peacekeeping as the top priority, the elimination of the Army General Staff system in 1965-1966, and integration of all three services in 1968⁹⁷ led to further stagnation in regards to maneuverist philosophy. This can in part be attributed to the dismemberment of the operational staff system. Although the Staff College system continued it was in a truncated form. The Canadian Army Staff College became what is now the Canadian Land Forces Command and Staff College, while the Royal Canadian Airforce Staff College became the Canadian Forces College with an emphasis on management techniques and “executive development” rather than operational art.⁹⁸

Restrictions to maneuverist-type thought were further levied by the philosophy of “management by objectives”⁹⁹ adopted in the late 1960s and 1970s. This was an attempt to quantify achievement by measurable results and it ignored the intangibles of warfare: morale;

⁹⁶ Colonel F. Lep. T. Clifford, OBE, CD, “National Survival—Exercise ‘Nimble Phoenix’”, Canada, Department of National Defence, Canadian Army Journal, vol. 15, no. 2 (Spring 1961) [database on CD]; available from Canadian Forces Army Lessons Learned Centre, Information Warehouse (LLIW/DDLR), Version 6.0 (April 1998).

⁹⁷ English, Lament For An Army, 52-4.

⁹⁸ The Royal Canadian Navy did not have a staff college system in place at this time. C.P. Stacy, “The Staff Officer: A Footnote to Canadian Military History,”48.

⁹⁹ Hasek, 153.

courage; and, endurance¹⁰⁰ by encouraging a highly centralized approach to leadership by managerial increments. As well as the limitations of the aforementioned warfighting qualities, I would suggest, “management by objectives” hindered development of the intuitive skills in senior commanders, necessary for practitioners of maneuver by restricting their ability to practice decentralized control. NATO forces in Europe continued to fixate on forward defense, even the introduction of AirLand Battle doctrine in 1979 had little effect on the political reality of this strategy¹⁰¹, which endured in one form or another until the end of the Cold War in 1993.

Many currently serving Canadian officers have considered 4 CMBG as being the “cradle of the Canadian Army” during the Cold War period. For operational commanders command of the brigade in Europe was considered the highpoint of a military education and career. In fact it is my belief that given doctrinal confusion of the Cold War period, organizational turbulence and operational level stagnation in Canada, and the NATO plans based on a forward defense of attrition, all combined to prevent development of maneuverist thought.

PEACEKEEPING (1947 - PRESENT)

Canadian isolationism is dead, and its resurrection seems most unlikely. The shrinking of the world has given new responsibilities to every nation, but very few are willing to pick up the burden. If peace is maintained and a nuclear holocaust averted, the credit may well go to those nations that took steps to prevent wars. Canadians can take justifiable pride in the role they have played.¹⁰² *Lieutenant J.L. Granatstein (1965)*

Canada’s formalized military contributions to the UN commenced in 1949, as until that point troop contributions had been on an ad hoc basis. Since the original inauguration of the UN,

¹⁰⁰ Ibid., 153-4.

¹⁰¹ By limiting theatre defense to forward defensive areas NATO commanders restricted their abilities to maneuver. The concepts of the deep battle and deep operations could only mitigate the limits on maneuver and corresponding thought. Maloney, 359.

¹⁰² Lieutenant J.L. Granatstein, Report No. 4 Directorate of History Canadian Forces Headquarters: Canada and Peace-keeping Operations [paper on-line], Canada, Department of National Defence, 22 October 1965, available from www.dnd.ca/hr/dhh/history_archives/engraph/cfhq_e.asp?cat=4, accessed February 23, 2001: 25.

Canada has contributed military elements to almost all missions (Annex A). Canadian reception to peacekeeping was, at least at first, best described as reserved:

There was little enthusiasm in meeting this request.[contribute to the Military Observer Group for India and Pakistan December 1948] The matter was referred to the Cabinet by Hon. Brooke Claxton, and in his words the Cabinet was 'allergic' to the proposal, wondering why Canada had been asked and who else had accepted. Memorandum, E[scott] R[eid] to S.S.E.A.[Secretary of State and External Affairs], 15 Jan 49, D.E.A.[Department of External Affairs] 5475-CX-2-40, vol. The decision as to whether or not Canada should participate was left up to the Prime Minister and the S.S.E.A. to make. There can be no doubt that Mr. Pearson carried the day. He even offered to have External Affairs pay the costs for two of the four officers requested. Copy of letter S.S.E.A. to Minister of National Defence, 18 Jan 49, H.Q.C. 2719-34/174, vol.1.¹⁰³

Since that period peacekeeping has moved to become, perhaps, the reason for being of the Canadian Land Forces. Unfortunately the result may be that in this environment the army risks losing the memory that it exists to fight and win wars. Until 1993 the operational experience of the Canadian Land Forces rotated between peacekeeping missions and participation in the Canadian NATO contribution in Europe.¹⁰⁴

Since 1993 that collective experience has been restricted to peace support operations. This proficiency at peacekeeping has been developed at the expense of warfighting skills. John English argues that it is almost impossible to maintain these combat skills in a peacekeeping environment.¹⁰⁵ The nature of the mission places importance on minimum force, mediation and compromise; commanders are not exercised as combat leaders. Furthermore, English goes on to write that operational UN procedures call for the referral of all incidents up the chain of command for diplomatic resolution. Thus the nature of peacekeeping lends itself more to internal security

¹⁰³ Ibid., 9.

¹⁰⁴ David Bercuson, Significant Incident: Canada's Army, the Airborne, and the Murder in Somalia (Toronto: McClelland and Stewart, Inc., 1996): 60.

¹⁰⁵ The peacekeeping English discusses is the United Nations Chapter VI type missions, which result in a lightly armed force or unarmed monitors with no enforcement powers being positioned between opposing factions. Since 1995 with the advent of peace enforcement missions, such as the North Atlantic Treaty Organization's Implementation Forces (IFOR) in Bosnia, these missions revolve around robust forces with the mandate and ability to use force to implement their mandate. These recent peace enforcement missions lend themselves to the use of most skills required for warfighting and encourage the maneuverist mindset.

and policing, rather than warfighting. These characteristics of peacekeeping do not lend themselves to enhancing an army's operational capacity and even peace enforcement operations are not of the same magnitude as warfighting, so will not remedy this deficiency.¹⁰⁶

Traditional peacekeeping, which forms the preponderance of the Land Force experience, lends itself to neither the tactical nor operational procedures required of maneuver warfare. Force structures are determined by political considerations instead of military needs. Command and control of specific military organizations are determined less by operational requirements than by the perceptions and policies of the contributing nations. Mission success normally depends on the cooperation of the warring factions and indeed due to this factor may receive less first rate military efforts in order to achieve the political endstate.¹⁰⁷ It requires centralized control and resolution of problems at the highest level. Peacekeeping does not develop officers to command in a maneuver environment, as the very nature of these operations mitigates against the development of the maneuver mindset.

THE LEGACY OF THE TWENTIETH CENTURY

With certain significant exceptions, the British Army in the Second World War was not very good, and those of us who were fighting in it knew where its weaknesses lay. Staff work was rigid. There was little encouragement of initiative, or devolution of responsibility. An absolute distinction was made between officers and other ranks; and as the war went on, there was an increasing reluctance to run risks and a greater reliance on massive firepower. There were often major problems of efficiency and of discipline. It is perhaps surprising we did as well as we did.”¹⁰⁸ *Professor Michael Howard (1991)*

While writing of the Canadian experience during the Second World War Bill McAndrew uses the aforementioned quote by Professor Michael Howard, himself a decorated Second World War veteran, to illustrate the Canadian way of war. McAndrew believes the pattern of the

¹⁰⁶ English, *Lament For An Army*, 60-1.

¹⁰⁷ John Hillen, “Peace(keeping) in Our Time: The UN as a Professional Military Manager,” *Parameters* (Autumn 1996) [journal on-line]; available from [http://carlisle-www.army.mil/usawc/parameters/96 autumn/hillen.htm](http://carlisle-www.army.mil/usawc/parameters/96%20autumn/hillen.htm), accessed November 5, 2001.

¹⁰⁸ Richard H. Kohn, 379.

campaigns he has analyzed demonstrate a method of conducting war that is problematic, an army that in theory encouraged initiative and responsiveness but in practice was controlling and methodical. An army that displayed a hierarchical command structure that inhibited execution and a staff structure that restricted communication between planners and those who implemented the plans. Indeed within this command and staff structure responsibility was centralized and all execution became dependent on the receipt of appropriate orders. Imaginative solutions fell prey to the bureaucratic and managerial mindset of the staffs.¹⁰⁹

To institutionalize maneuver warfare one must train units and formations to fight and commanders to think.¹¹⁰ Canadian commanders currently espouse the latest tenets of maneuver but are unknowingly restricted by their own historical legacy. Canadian operational experience in peace and war over the last century has been characterized by: static warfare; attrition; lack of introspective thought; inadequate doctrine; centralized control and decentralized execution; rigid and uncompromising staff procedures as a result of a failure to develop and maintain an operationally capable general staff; and more recently, a neglect of warfighting due to the demands of peace support operations. The single thread of historical continuity throughout all experiences is a fixation with the limited objectives of the symmetrical battlefield. This more than any one thing is our legacy and in order to become true maneuverists at the operational level we must not only espouse the tenants of the latest doctrine, but also actively seek to remember the lessons of our past and avoid repeating them. It is necessary to rid ourselves of our historical fixation with the methodical battle and focus on how to develop commanders who can make decisions on the asymmetrical battlefield.

¹⁰⁹ William McAndrew, "Operational Art and the Canadian Army's Way of War," 96-7.

¹¹⁰ Richard D. Hooker, Jr., "Implementing Maneuver Warfare," in *Maneuver Warfare: An Anthology*, ed. Hooker, Jr., Richard D., with a forward by Gen. John R. Galvin, United States Army (Retired), (Novato, California: Presido Press, 1993): 225.

War-fighting doctrine developed in the Canadian Corps during the First and Second World Wars formed the basis, the doctrinal principles, of what we are today.¹¹¹
Lieutenant-Colonel Roman J. Jarymowycz (1999)

THE WAY AHEAD

The development, adoption, and implementation of any form of institutional change is difficult in any large organization. This is especially true in the army.¹¹² *Michael J. Meese (1993)*

The manner in which a country conducts war is an image of its national culture and heritage. Current Canadian visions of warfighting originated in the successful operations of the Canadian Corps in the First and Second World Wars and have been confirmed by our subsequent experiences.¹¹³ Our challenge is to create institutional change in order to successfully employ land forces in the chaotic, asymmetric environment of the twenty-first century; to embrace and implement the tenets of our current maneuver doctrine.

Maneuver doctrine delineates a method of conducting operations that is applicable across the spectrum of conflict, from high to low intensity war and related activities. It provides commanders flexibility to employ military power in a manner designed to most effectively utilize limited resources in any types of situation.¹¹⁴ When considering the Coalition experience in the Gulf War one can visualize the potential for overwhelming results of the correct application of maneuver doctrine.¹¹⁵ These achievements can be duplicated in many types of warfare by well-

¹¹¹ Jarymowycz, 51.

¹¹² Michael J. Meese, "Institutionalizing Maneuver Warfare: The Process of Institutional Change," in Maneuver Warfare: An Anthology, ed. Hooker, Jr., Richard D., with a forward by Gen. John R. Galvin, United States Army (Retired) (Novato, California: Presido Press, 1993): 193.

¹¹³ Jarymowycz, 50-51.

¹¹⁴ Captain Ian Hope, "Changing a Military Culture: Manoeuvre Warfare and a Canadian Operational Doctrine Part 1 of 2," The Canadian Land Force Command and Staff College Quarterly Review 5, no.1/2 (Spring 1995): 5.

¹¹⁵ Captain Ian Hope, "Manoeuvre Warfare and Directive Control: The Basis for a New Canadian Military Doctrine Part 2 of 2," 24.

structured military organizations with applicable doctrine, education and training.¹¹⁶

Unfortunately, in Canada, the principles of maneuver are bandied about in the academic environment but have not demonstrated wide spread application. The indicators of maneuver: mobility, agility, offensive action, surprise, deception, penetration, and tempo have not been present throughout our past and current operations. One continues to try to impose order on chaos and fight the plan as opposed to our adversary. By not focusing on the disruption of the enemy systems we do not demonstrate adaptiveness to our current operational environment. Maneuver warfare provides a psychological force multiplier that enables maximum use of limited physical resources.¹¹⁷

In order to be successful practitioners of maneuver philosophy the focus must be on the manner in which we think. Uncertainty must be considered from a different perspective. Rather than direct all efforts to reduce this ever present specter in order to produce the perfect solution, one must accept ambiguity and its ever present friction. Military organizations must be created, organized and trained to perform under those conditions and use that haziness as a force multiplier and enabler.¹¹⁸ Increased capability in the realm of maneuver thinking and action can be achieved by a conscious decision to make changes commensurate with the operating environment of the future, the defense requirements of Canada and the views of the Canadian populace.¹¹⁹ Success or failure in the upcoming decades is contingent on choices that the Land

¹¹⁶ Meese, 195.

¹¹⁷ David M. Keithly and Stephen P. Ferris, "Auftragstaktik, or Directive Control, in Joint and Combined Operations," Parameters XXIX, no. 3 (Autumn 1999) [journal on-line] available from <http://Carlisle-www.army.mil/usawc/parameters/99autumn/keithly.htm>, accessed November 5, 2001.

¹¹⁸ Commander Gerard Rocolato, United States Navy, "Methodical Battle," Proceedings 122/2/1, no. 116 (February 1996): 33.

¹¹⁹ Vice-Admiral Gary Garnett, "The Canadian Forces and The Revolution in Military Affairs: A Time For Change," Canadian Military Journal 2, no. 1 (Spring 2001) [journal on-line] available from http://www.journal.dnd.ca/vol2/no1_e/rev1_e.html, accessed November 2, 2001.

Forces are currently making. Peter Paret has aptly outlined this dilemma in a statement, which includes all the areas historically relevant to the Land Forces:

The strategy and operations of any war can be understood in light of the conditions of the ten or twenty years before its beginning. Technology, organization, doctrine, training, command and staff appointments - all the essentials of action in war – are put into place and developed in peacetime. The testing experience of combat will bring about change, but prewar elements continue to affect many events throughout the longest of conflicts.¹²⁰

Recognizing that it is simplistic to merely outline a requirement for change and leave it for others to explore the implementation of the proposition it is necessary to understand the barriers to change, the warfighting environment of the twenty-first century, and the domains of meaningful military change; technology; command; organizations; doctrine; education and staff. Without knowledge of these requirements, it is impossible to move from the past to the future.

Armies are traditionally institutions resistant to alteration. Habitually it takes conflict to produce meaningful change due to the existence of an adversary against whom the institution must compete efficiently and emerge victorious. However, periods of peace are normally characterized by stagnation and inefficiency. As a result of the absence of outside impetus for adjustment it is very challenging for military systems to profit from current or hypothetical future changes. It is much simpler to rely on perceived lessons of the past to provide indicators for the present.¹²¹ Thus, the conundrum for a peacetime army becomes almost irresolvable as illustrated in Figure 2.

Although it is difficult to produce innovation in a system when conflict is absent it is not impossible. Transformation can occur by recognizing the aspects to the system that must be addressed to produce meaningful change and creating processes that capture and implement

¹²⁰ Dr. Scott Robertson, "Experimentation and Innovation In The Canadian Forces," Canadian Military Journal 2, no.2 (Summer 2001) [journal on-line] available from http://www.journal.dnd.ca/vol2/no2_e/leadership_e/lead2_e.html, accessed September 27, 2001.

¹²¹ Canada, National Defence., Army Officer Development, Department of History and Heritage, 133. (D1), quoted in Bill McAndrew, "Canadian Officership: An Overview," in Generalship and the Art of the Admiral: Perspectives on Canadian Senior Military Leadership, ed. Bernd Horn and Stephen J. Harris (St. Catharines, Ontario: Vanwell Publishing Limited, 2001), 47.

innovation.¹²² An example of such a process is that instituted in the German Army during and post First World War. By capturing the lessons of the lowest level of tactical unit and permitting shared ownership of innovation in addition to widespread distribution of the results of staff analysis the German Army was very adaptive in war and continued to make changes during the inter war years.¹²³ The end result of this innovation was the combined arms synergy of the

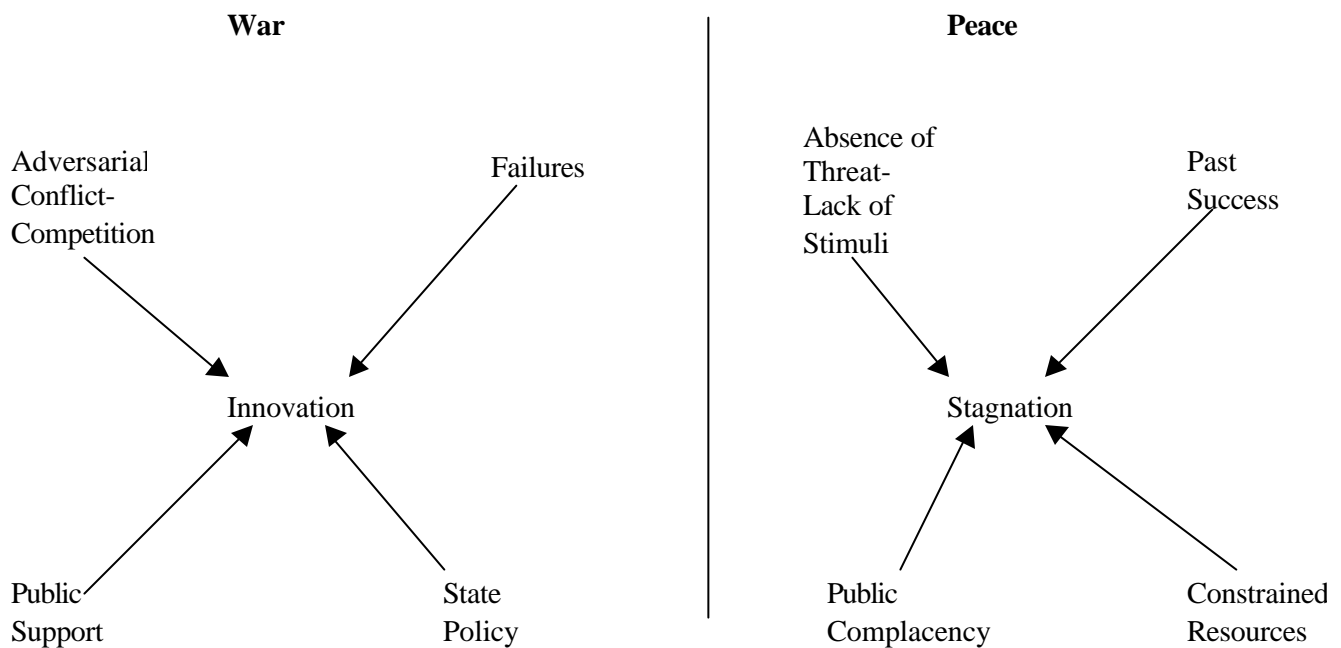


Figure 2 – Impetus for Change

mechanized forces that launched with such great success at the commencement of the Second World War. The Land Forces have the institutional beginnings of such a systemic process in the Land Force Doctrine and Training System (LFTDS). Analogous to the United States Army

¹²² Robertson, available from http://www.journal.dnd.ca/vol2/no2_e/leadership_e/lead2_e.html, accessed September 27, 2001.

¹²³ William McAndrew, "Operational Art and the Canadian Army's Way of War," 90-1.

Training and Doctrine Command (TRADOC) it provides, albeit now in a rudimentary form, the same impetus for innovation that occurred in the German Army. However LFDTS lacks, at this time, the breadth of vision, authority and mandate, to enact systems transformation in the same way as TRADOC. Regardless, the potential to implement meaningful and lasting changes does exist.

In many ways the Land Forces are constrained by not only historical success but also recent and current operations. Traditional peacekeeping, which for the Canadian public has become synonymous with the exercise of Canadian military power, is a limited force operation. This type of operation is normally confined to separating factions that have agreed to a cessation of hostilities and observer type missions emphasizing centralized control and limited application of force. Military doctrine for peacekeeping was predicated on the consent of the warring parties, passive utilization of military forces and strict impartiality, a reinforcement of our attritionist heritage. However, the missions of modern peace enforcement are more akin to warfare of the twenty-first century. Simultaneous comprehensive campaigns attempt to address diplomatic, informational, military and economic aspects of the conflict. At the same time the environment is asymmetric and usually non-permissive with innumerable state and non-state actors.¹²⁴

Peace operations are providing a foretaste of the warfighting in the twenty-first century; a heightened degree of complexity, increased rapidity and constantly elevated tempo, physical and psychological isolation and hitherto unseen lethality.¹²⁵ Adversaries can be non-state and motivated by issues other than that of policy. They will attack in unpredictable ways using the strengths of a nation as its weakness to gain a temporary advantage that can be exploited. Conflict will not be confined to discernable regions and all of society may be involved, with the concept of

¹²⁴ Hillen, available from [http://carlisle-www.army.mil/usawc/parameters/96 autumn/hillen.htm](http://carlisle-www.army.mil/usawc/parameters/96%20autumn/hillen.htm), accessed November 5, 2001.

¹²⁵ Lieutenant Colonel Antulio J. Echevarria and Major Jacob D. Biever, "Warfighting's Moral Domain," *Military Review* LXXXX, no. 2 (March-April 2000) [journal on-line] available from <http://www.cgsc.army.mil/MILREV?English/MarApr00/inxma.htm>, accessed November 5, 2001.

combatants and non-combatants disappearing. Military and civilian installations of importance will become dispersed and societies will conduct operations with all instruments of power. The distinction between peace and war may become difficult to discern. Effectiveness in joint and multi-agency operations will most likely determine success.¹²⁶ Due to the increasing role of technology the intellectual dimension of warfare will increase. No longer will it be confined to a clash of wills between opposing commanders but of thinking, networked adversaries each trying to triumph over the other.¹²⁷ The military aspects of such warfare are a prescription for maneuverist philosophy and will require mature and experienced leaders as well as cohesive units, capable of independent operations.¹²⁸ The Summary of Conclusions from the Canadian Forces (CF) *Debrief the Leaders Project* (Officers) tends to support this contention:¹²⁹

- While the prime function of the CF remains the application of military force in support of government policy, the use of force will be in discrete amounts fully integrated with, and usually subordinated to political, diplomatic and economic measures.
- The need for global security will continue to place a great premium on leadership in the future, but new competencies are needed to supplement traditional leadership competencies as defined by another era of war and fighting
- Strategic and operational knowledge and skill sets must be created, over and above the excellent tactical training that historically has characterized the CF.
- Officer professional development will need to place due emphasis on critical thinking, strategic conceptualization and effective decision-making, as well as on the ability to understand and work in diverse cultures.

In order to function as maneuverists in the twenty-first century the conception of the

¹²⁶ William S. Lind, Colonel Keith Nightengale, United States Army, Captain John F. Schmitt, United States Marine Corps, Colonel Joseph W. Sutton, United States Army, and Lieutenant Colonel Gary I. Wilson, United States Marine Corps. "The Changing Face of War: Into the Fourth Generation." Marine Corps Gazette (October 1989): 22-26. Journal on-line. Available from http://www.d-n-i.net/FCS_Folder/4th_gen_war_gazette.htm Accessed September 12, 2001.

¹²⁷ J. Michael Myatt, "Comments on Maneuver," Marine Corps Gazette (October 1998)[Journal on-line] available from EBSCOhost, accessed November 5, 2001.

¹²⁸ Echevarria, available from <http://www.cgsc.army.mil/MILREV?English/MarApr00/inxma.htm> accessed November 5, 2001

¹²⁹ Canada, National Defence, The Debrief The Leaders Project (Officers) (May 2001), 26.

Land Forces as a hierarchical, centralized organization must change to embrace reality; that of the vertical and horizontal system of systems of the information age. The Network Centric, information-based system is becoming reality. The 1994 White Paper discussed the requirement to augment command and control structures and decrease headquarters to streamline communications within the CF.¹³⁰ The need for technological enablers was balanced with the requirement for fiscal constraint, however it was acknowledged that this type of equipment is required to provide troops with, "...the means to carry out their missions."¹³¹ In 1996 the Commander of Land Force Command further elaborated requirements when outlining the Land Force Information System Project, which is designed to increase the capacity of Command, Control, Communications and Intelligence at the operational and tactical levels:

Success in future operations demands the ability to execute one's own decision cycle within that of any opposition.¹³²

The collection and dissemination of information and intelligence products is becoming centralized and thus available to all who have the requirement to access. This further aids the Land Forces in its transition to a networked system of systems.

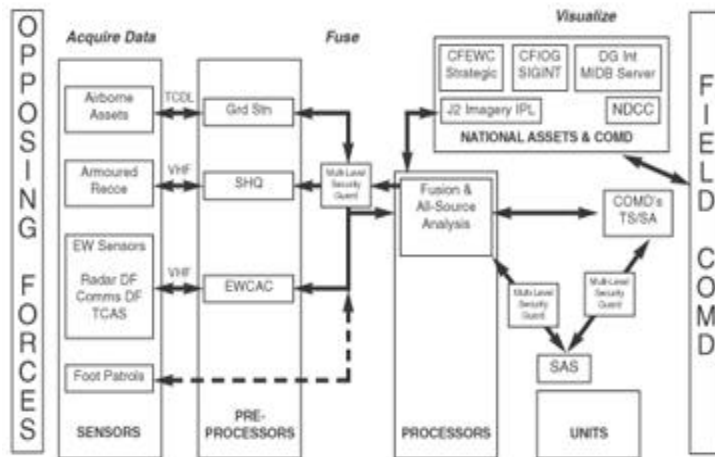


Figure 3 – A graphical depiction of the Land Force's Intelligence, Surveillance, Target Acquisition, and Reconnaissance (ISTAR) process. Internet document. Available from http://www.journal.dnd.ca/vol2/no1_e/rev1_e.html. Accessed November 2, 2001.

¹³⁰ Canada, National Defence, 1994 Defence White Paper (1994), 21.

¹³¹ Ibid. 49-50.

¹³² Canada, Office of the Commander Land Force Command, Army 2000 Campaign Plan (3136-1(Comd) 21 March 1996), 2.

The technology that will permit transparent communication between all levels of our command and control apparatus must defeat the historical legacy of hierarchical, centralized headquarters and modes of operation if the Land Forces are to succeed in the network centric environment that is war in the twenty-first century.¹³³ Although technological enablers will not change that which is the nature of command, it will greatly enhance the speed of decisions and subsequent action, as well produce greater time for formulation of appropriate actions. The ability to share intent and concept throughout the network simultaneously will greatly enhance the Commander's ability to empower his subordinates to make accurate and timely decisions. This "self-synchronization of forces"¹³⁴ will permit commanders to establish and maintain unity of effort with less friction than previous epochs. The efficient use of such technological enablers to filter extraneous data and produce a relatively accurate common picture of the battlefield may permit commanders to focus on the monitoring rather than control of operations.¹³⁵

Technology, however, is not a panacea for all that ails us. Major General J.F.C. Fuller pointedly indicated the limitation of technology from his First World War experiences:

In the World War nothing was more dreadful to witness than a chain of men starting with a battalion commander and ending with an army commander sitting in telephone boxes, improvised or actual, talking, talking, talking, in place of leading, leading, leading.¹³⁶

Additionally, commanders can be overloaded with information and given the current nature of the Land Forces military culture the temptation to see, know and do everything will be omnipresent.

¹³³ Garnett, available from http://www.journal.dnd.ca/vol2/no1_e/rev1_e.html, accessed November 2, 2001.

¹³⁴ Colonel Pierre Forgues, "Command in a Network-Centric War," Canadian Military Journal 2, no. 2 (Summer 2001) [journal on-line] available from http://www.journal.dnd.ca/vol2/no2_e/leadership_e/lead2_e.html, accessed September 27, 2001.

¹³⁵ Ibid.

¹³⁶ Major-General J.F.C. Fuller, Generalship Its Diseases and Their Cure: A Study of The Personal Factor in Command (Harrisburg, Pa: Military Service Publishing Co. 1936; reprint, 1982), 61.

Systems must be designed to reduce the temptation of commanders to create such a situation. Mechanisms, technological and human, must exist to present to commanders the information necessary to make operationally sound decisions and provide the leeway for subordinates to do the same.¹³⁷ One can take heed from the lessons of France during the interwar years of the 1930's; as the quickening tempo of mechanized warfare threatened the ability of commanders to provide detailed moment by moment direction to their subordinates. The French Army dogmatically adhered to its vision of imposing order upon the chaotic environment of the fluid battlefield.¹³⁸ This vision of the methodical battle ultimately contributed to the French inability to react quickly to the German invaders of 1940 and their defeat. In order to assist the Land Forces to overcome its restrictive legacy and utilize technology in a manner that will maximize its benefits in a network centric environment a program of simulations and exercises could be devised. These training and educational experiences would provide assistance with the selection of necessary information from the immense amount available as well as the defense of one's own systems and how to attack an adversarial system.¹³⁹

Command is a many-faceted thing. The Canadian legacy mirrors that of the allies in the Second World War. A "...profound mistrust of a superior combined with enforced blind obedience to his every word."¹⁴⁰ This approach, which is the heritage of the Land Forces, will be difficult to amend. Martin Van Creveld presents command as a search for certainty, in which, the commander predicates all decisions on having the level of information on all factors pertaining to

¹³⁷ Forgues, available from http://www.journal.dnd.ca/vol2/no2_e/leadership_e/lead2_e.html, accessed September 27, 2001.

¹³⁸ Robert Allan Doughey, The Seeds of Disaster: The Development of French Army Doctrine 1919-1939 (Hamden, Connecticut: The Shoe String Press, Inc., 1985), 94.

¹³⁹ Robert P. Haffa, Jr., and James H. Patton, Jr., "Gaming the 'System of Systems'," (Spring 1998) [journal on-line] available from http://www.d-n-i.net/FCS_Folder/4th_gen_war_gazette.htm accessed September 12, 2001.

¹⁴⁰ Simpkin, 233.

a dilemma before making that choice.¹⁴¹ The conundrum thus becomes how to reduce the level of tension between the restrictive legacy of the Twentieth Century and the doctrine of maneuver complicated by the desire of the commander to possess the greatest amount of certainty throughout operations? Van Creveld views this conflict in simplistic terms:

The history of command can thus be understood in terms of a race between the demand for information and the ability of command systems to meet it.¹⁴²

Technology has previously been presented as an enabler, although Van Creveld hypothesizes that the danger of increased information technology within command systems is that of distinguishing the relevant from the masses of the information available. Van Creveld focuses on the human elements of command as primary in the context of the inherent friction of war and the conflict of opposing wills. With this in mind and returning to the question posed earlier one must view the concept of command using maneuver doctrine in network centric environment as an exercise in the art of leadership. Richard Simpkin articulates this idea simply, as a “supple chain”, that is, “...a chain of trust and mutual respect running unbroken between theatre or army commander and tank or section commanders.”¹⁴³ Command, using the principles of maneuver warfare, allows the establishment of the supple chain. The primary methods of command within maneuver doctrine are mission orders and trust in subordinates. By utilizing the techniques of articulating commander’s intent, conducting mission analysis, and designation and use of a main effort, the decentralization of command will occur. In this setting commanders will make appropriate decisions and take action to achieve positive results without specific orders.¹⁴⁴ Van Creveld

¹⁴¹ Van Creveld states, “From Plato to NATO, the history of command in war consists essentially of an endless quest for certainty – certainty about the state and intention’s of the enemy forces; certainty about the factors that together constitute the environment in which war is fought, from the weather and the terrain to radioactivity and the presence of chemical warfare agents; and, least but definitely not least, certainty about the state, intentions and activities of ones own forces.” Martin Van Creveld, Command in War, (Cambridge, Massachusetts: Harvard University Press, 1985), 264.

¹⁴² Ibid., 265.

¹⁴³ Simpkin, 241.

¹⁴⁴ Hope, “Manoeuvre Warfare and Directive Control: The Basis for a New Canadian

suggests that organizations can design their command structures to operate in the environment of chaos, or the “province of uncertainty”, while less information will increase their likelihood of success. He outlines five principles for organizing command systems to achieve success:¹⁴⁵

1. Decision making authority should be at the lowest level of the chain of command as possible to promote freedom of action.
2. Organizations make decentralization of decision-making possible by structuring units, at the lowest level, to be capable of self-sufficiency in operations.
3. Reporting and information systems need to work reciprocally throughout the organization.
4. Headquarters must not only rely on units to send information but maintain an active search capability outside headquarters to supplement this information.
5. Formal and informal networks of communications must be maintained.

Within the Canadian Land Force elements of the majority of these tenets exist. From my experience, Land Force headquarters lack the active search capability in order to obtain the accurate understanding of current operations within subordinate units. We lack a capability for the directed telescope.¹⁴⁶ Perhaps, as in the Second World War, the Land Force could consider the use of a liaison system that would send information directly to commanders;¹⁴⁷ or information technology could be used to produce a common operational picture. However, it is my belief that such a system requires a human component to provide a true “coup d’oeil”. Doctrinally, technically and procedurally the rudiments of command systems appropriate for maneuver theory exists, however what is lacking is the overarching vision of coherent and authoritative doctrine to

Military Doctrine Part 2 of 2,” 8-9.

¹⁴⁵ Van Creveld, 269-70.

¹⁴⁶ In the quest for certainty commanders sometimes utilize qualified and trusted officers to act as observers and report their findings. These special agents exist outside the chain of command and report back to the originating authority. In the manner of a telescope directed towards a certain point these officers provided information from specified units and operations. Lieutenant Colonel Gary B. Griffin, The Directed Telescope: A Traditional Element of Effective Command (Fort Leavenworth, Kansas: Combat Studies Institute, 1991), 1.

¹⁴⁷ Ibid., 21-3.

integrate the disparate elements and provide the shared vision so necessary to enable individuals and organizations to function as a coherent whole.¹⁴⁸

Throughout the last century the Canadian Land Force adopted verbatim other or made use of pieces of other countries doctrine. Even B-GL-300-000/FP-00 Canada's Army: We Stand on Guard for Thee, while reflecting the needs of Canada and its military, drew heavily from both United States Army and United States Marine Corps sources.¹⁴⁹ Unfortunately, while as a keystone document this manual is admirable, due to the nature of our military history it is at odds with our present military reality thus "doctrinal dissonance"¹⁵⁰ is the result. To have a meaningful impact on the military culture and institutionalize new doctrinal tenets doctrinal re-writes must include education, training administrative, personnel, promotion and recruitment policies.¹⁵¹ Doctrine must be made relevant to the organization, because, as proposed in B-GL-300-000/FP-00, "...history has shown that an army which lacks relevant doctrine, *or fails to practice it*, will

¹⁴⁸ William McAndrew points out with regard to the importance of doctrine, "While Canadian commanders lacked the need, means, and inclination to think or function at the operational level in the Second World War, they certainly felt the effects of others' use and misuse of its concept. This is particularly evident at the junction at the top with strategy, from which Canadians were excluded, and at the bottom with tactics, with which they were very much concerned. The joint between the operational and tactical levels would seem to be a vital factor in military effectiveness. Mere tactics themselves may not win wars, but the purest operational conception will remain barren if the tactical means to implement it are deficient. Several factors link the tactical and operational levels, for example, troop quality, organizations and technology. The most vital ingredient, however would seem to be doctrine; not doctrine as dogma, but simply the shared premises, assumptions, and procedures that allowed soldiers, units and formations to function as a coherent whole." McAndrew, "Operational Art and the Canadian Army's Way of War," 90.

¹⁴⁹ While stationed in Kingston, Ontario during the writing of this publication, in 1995, the primary authors of this document Major (now Lieutenant Colonel) Ian Hope and Major Bob Near, discussed the progress of their work and sources with me on several occasions. However it was their intent to develop a doctrine manual that reflected Canada and her security needs. I believe they were successful.

¹⁵⁰ In other words, operations are carried out in a manner commensurate with our military culture, not our published doctrine. Paul Johnston writes, "There may or may not be nationally determined ways in warfare, but specific military organizations certainly have specific organizational cultures, in much the sense that business theory describes corporate cultures." Paul Johnston, "Doctrine Is Not Enough: The Effect of Doctrine on the Behavior of Armies," Parameters 30, no. 3 (Autumn 2000) [journal on-line] available from EBSCOhost, accessed November 2, 2001.

¹⁵¹ Ibid.

fail operationally.”¹⁵² During the first half of the twentieth century reliance on the close relationship with the British Army to provide guidelines for strategy, organization, education and professional guidance inhibited the creation of a uniquely Canadian defense policy, as well as structures and organizations capable of planning and conducting effective military operations.¹⁵³ In the post Second World War era with an increasing United States military influence Canada adopted the technological approach of the Cold War originating from the doctrine of “massive retaliation”, systems theory and management principles.¹⁵⁴ With the emergence of B-GL-300-000/FP-00 there is the opportunity to shed ourselves of the historical restrictions of the past and integrate the technological innovation of the past two decades to this Canadian version of maneuver doctrine and prepare ourselves to fight in the twenty-first century.¹⁵⁵ To accomplish this we must educate officers and create a core of trained commanders and staff otherwise we will risk being faced with the tacticization of doctrine described by Paul Johnston, in “Doctrine Is Not Enough: The Effect of Doctrine on the Behavior of Armies,”:

Certainly formal doctrine is an important source of this character [military culture]. So too are experience and value systems of the army’s leaders. Reflections of this character include the organization an army adopts for itself, the types of training it chooses to indulge in, and indeed, the formal doctrine it chooses to adopt for itself. Since armies choose doctrines, and not the other way around, fundamentally doctrine may be an effect than a cause.¹⁵⁶

Canadian military education has been faulted as being designed to reflect military science rather than art so that it could be “mechanically efficient in peace and war”.¹⁵⁷ This permitted

¹⁵² Canada, National Defence, B-GL-300-000/FP-00 Canada’s Army: We Stand on Guard for Thee (01 April 1998), 88.

¹⁵³ Adrian Preston, “The Profession of Arms in Postwar Canada, 1945-1970,” World Politics 2 (January 1971): 195-6.

¹⁵⁴ *Ibid.*, 201-2.

¹⁵⁵ Colonel H.J. Marsh, “Command Challenges in the Twenty-First Century,” in Generalship and the Art of the Admiral: Perspectives on Canadian Senior Military Leadership, ed. Bernd Horn and Stephen J. Harris (St. Catherines, Ontario: Vanwell Publishing Limited, 2001), 190.

¹⁵⁶ Johnston, available from EBSCOhost, accessed November 2, 2001.

¹⁵⁷ Preston, 196-7.

specialized contributions to Imperial, Allied and later United Nations forces when it was required but developed a military education system that marginalized the qualities of creativity and vision required for the understanding and practice of the “art” of war. Education will provide the seeds of success in propagating and implementing a coherent, encompassing doctrine of maneuver warfare. The alternative is that faced during the interwar years of the 1920’s and 30’s. Due to restricted budgets, low personnel strength, outmoded equipment, and limited opportunity to exercise large formations intellectual development was constrained.¹⁵⁸ The effects of this neglect became readily apparent during the Second World War.

Despite the truncation of the Command and Staff College education system and disappearance of the General Staff as a result of the unification of the Canadian Forces, maneuver philosophy and doctrine can be inculcated within the Land Force school structure. If students at the tactical level can learn military decision making then be encouraged and taught to utilize it within the maneuver context these students will eventually learn to do the same at the operational and strategic spheres.¹⁵⁹ Additionally one must recognize the role of Recognition Perceived Decisions (RPD) in maneuver warfare¹⁶⁰ and construct training events and simulations to exploit this little studied factor. This will assist with building a repertoire of skills to enable commanders and staffs to function effectively to exploit fleeting opportunities that will mark the asymmetrical environment of the Twenty-first Century. This will assist in permitting the force as a whole to operate at a tempo greater than that of one’s adversary.¹⁶¹ The Land Force must also infuse the professional education system with an approach that provides a learning environment that

¹⁵⁸ William McAndrew, “Operational Art and the Canadian Army’s Way of War,” 89.

¹⁵⁹ Wyly, 265.

¹⁶⁰ Polk, 271.

¹⁶¹ Roncolato, 33.

provides operational level instruction that contains a solid grounding in military history and theory, something that is absent at present.¹⁶²

Changes in the current curriculum of Land Force training and education institutions will greatly enhance the implementation of maneuver doctrine. However maintaining a constant throughput of officers attending these institutions is also important. The experience of the past has indicated that maintaining well educated and trained staffs are necessary for success:

Years of hard experience had made the Canadian Corps a remarkably effective fighting machine. Although the public back home did not realize it, much of its efficiency was due to the skill of its staffs. Competent and painstaking staff work was at the bottom of such battles as the great set-piece attack at Vimy Ridge or the remarkable operation in which the Corps, supported by a very complex artillery program, advanced across the short dry section of the Canal du Nord on a front of 2600 yards and then fanned out to attack on a front of more than 15,000 yards.¹⁶³

Although this quotation of C.P. Stacey trumpets the success of the methodical approach it does aptly indicate the necessity of trained staff to achieve victory. Stacey also discusses the necessity to create and manage sources of trained staff offices in order to assist commanders with the architecture of such success.¹⁶⁴ Currently we train a very low percentage of the officer corps in higher-level staff functions, it has become a discriminator for promotion and career success. The Land Force should make staff training more accessible to its Officer Corps in order to maintain a pool of trained staff officers, who would be prepared to support any operational demands.

CONCLUSION

From this discussion it is evident that no single facet of technology, command, organizations, doctrine, education or staff can be altered to produce a Canadian Land Force system structured to achieve success using the principles of Maneuver Warfare in the

¹⁶² Lieutenant Colonel Richard J. Young is quite harsh in his critique of the professional development of the Canadian Officer Corps. He observes the current system is both limited and lacking in scope. Lieutenant Colonel Richard J. Young, "Clausewitz and His Influence on U.S. and Canadian Military Doctrine," in The Changing Face of War: Learning From History, ed. Allan D. English (Montreal and Kingston: McGill-Queen's University Press, 1998), 19-20.

¹⁶³ Stacey, "The Staff Officer", 48.

asymmetrical, network centric warfare of the twenty-first century. It is important to recognize that our history has produced the Canadian Land Force of today. Also, that the great and not so great events of the past and the present have a sometimes evolutionary, sometimes chaotic, connection with that of the future. The Canadian Land Forces must be especially cognizant of the period moving from the industrialized war of 1914-1918 to the information age of the late 20th Century. Canada and Canadians have generally been less than effective in using the military instrument of national power throughout the twentieth century. This is because it has not been dispassionately studied and examined in our national context to provide us with useful and relevant lessons for the present. In the future Canada's Land Force will not have the luxury of time to produce meaningful innovation in response to the current crisis. Before we commit young Canadians to harms way it is imperative we understand what we are doing, why we are doing it, and the implications of these actions within the global community. The doctrine of Maneuver Warfare is aptly suited to the manner in which the Canadian Land Forces wish to fight future wars. In order to implement it in a meaningful manner it is imperative that we overcome the restrictive legacy of our institutionalized past to produce the organizational culture needed for the demands of Canada's national security strategy.

Battles are won by slaughter and maneuver. The greater the general, the more he contributes in maneuver, the less he demands in slaughter.¹⁶⁵ *Winston Churchill quoted by Major General Robert H. Scales, United States Army (1999)*

¹⁶⁴ Ibid., 49.

¹⁶⁵ Major General Robert H. Scales, Jr., United States Army, "A Sword With Two Edges: Maneuver in 21st Century Warfare," Strategic Review XXVII, no. 2 (Spring 1999): 45.

APPENDIX

Appendix A - Peacekeeping Operations over the Years and Canada's Contribution

(Note: Bold type indicates Canada is still contributing)

Country or Area	Short Form of Mission Name	Duration	Size of Mission	Maximum Canadian Contribution	Name of Operation and Mandate
Balkans	UNSCOB	1947-1951	Unknown	0	United Nations Special Committee On the Balkans. Observe whether Greece, Albania, Bulgaria and Yugoslavia are complying with UN recommendations
Korea	UNTCOK	1947-1948	30	2	United Nations Temporary Commission on Korea. Supervise elections in South Korea
Middle East	UNTSO	1948-	572	22	UN Truce Supervision Organization. Supervise 1948 cease-fire and subsequent armistice and peace
India, Pakistan	UNMOGIP	1949-1996	102	27	UN Military Observer Group in India and Pakistan (Kashmir). Supervise cease-fire between India and Pakistan
Korea	UNCMAC	1953-	Unknown	1	UN Command Military Armistice Commission. Supervise 1953 armistice
Indochina	ICSC	1954-1974	400	133	International Commission for Supervision and Control (non-UN mission). Supervise withdrawal of French forces
Egypt	UNEF	1956-1967	6,073	1,007	United Nations Emergency Force. Supervise withdrawal of French, British and Israeli forces from Sinai
Lebanon	UNOGIL	1958	590	77	UN Observation Group in Lebanon. Ensure safety of Lebanese borders
Congo	ONUC	1960-1964	19,828	421	UN Operation in the Congo. Maintain law and order
West New Guinea	UNSF	1962-1963	1,500	13	UN Security Force in West New Guinea (West Irian). Maintain peace and security for UN Temporary Executive Authority
Yemen	UNYOM	1963-1965	190	36	UN Yemen Observation Mission. Monitor cessation of

					Saudi Arabian support and withdrawal of Egyptian forces
Cyprus	UNFICYP	1964-	6,410	1,126	UN Peacekeeping Force in Cyprus. Maintain law and order
Dominican Republic	DOMREP	1965-1966	3	1	Mission of the Representative of the Secretary-General. Observe ceasefire and withdrawal of OAS forces
India, Pakistan	UNIPOM	1965-1966	160	112	UN India-Pakistan Observation Mission. Supervise cease-fire
Nigeria	OTN	1968-1969	12	2	Observer Team to Nigeria (non-UN mission). Supervise cease-fire
South Vietnam	ICCS	1973	1,200	248	International Commission for Control and Supervision. (non-UN mission). Supervise truce
Egypt, Israel	UNEF II	1973-1979	6,973	1,145	UN Emergency Force II. Supervise deployment of Israeli and Egyptian forces
Syria (Golan)	UNDOF	1974-	1,340	230	UN Disengagement Observer Force. Supervise ceasefire and redeployment of Israeli and Syrian forces
Lebanon	UNIFIL	1978-	5,900	117	UN Interim Force in Lebanon. Confirm withdrawal of Israeli forces
Sinai	MFO	1986-	2,700	140	Multinational Force and Observers (non-UN mission). Prevent violation of Camp David Accord
Afghanistan	UNGOMAP	1988-1990	50	5	UN Good Offices Mission in Afghanistan and Pakistan. Confirm withdrawal of Soviet forces from Afghanistan
Iran, Iraq	UNIIMOG	1988-1991	845	525	UN Iran-Iraq Military Observer Group. Supervise ceasefire and forces' withdrawal
Angola	UNAVEM	1989-1991	70	0	UN Angola Verification Mission. Monitor Cuban troop withdrawal
Central America	ONUCA	1989-1992	1,100	174	UN Observer Group in Central America. Verify compliance to Esquipulas Agreement
Namibia	UNTAG	1989-1990	4,500 1,500	301 100 civpol	UN Transition Assistance Group, Namibia. Assist in transition to independence
Nicaragua	ONUEN	1989	Unknown	5	UN Observer Mission for the

					Verification of the Electoral Process in Nicaragua
Afghanistan, Pakistan	OSGAP	1990-1993	10	1	Office of the Secretary-General in Afghanistan and Pakistan. Provide military advisory unit
Haiti	ONUVEH	1990-1991	65	11	UN Observers for the Verification of Elections in Haiti. Monitor 1990 elections
Angola	UNAVEM II	1991-1994	350	15	UN Angola Verification Mission. Monitor cease-fire
Balkans	ECMM	1991-	300	15	European Community Monitor Mission. (non-UN mission). Monitor cease-fires
Cambodia	UNAMIC	1991-1992	1,090	103	UN Advance Mission in Cambodia. Monitor cease-fire and establish mine awareness
El Salvador	ONUSAL	1991-1995	622	55	UN Observer Mission in El Salvador. Monitor human rights, progress toward military reform, peace
Iraq, Kuwait	UNIKOM	1991-	1,440	301	UN Iraq-Kuwait Observation Mission. Monitor demilitarized zone
Iraq	UNSCOM	1991-	175	9	UN Special Commission. Inspect and, if necessary, destroy Iraq's biological and chemical weapons
Western Sahara	MINURSO	1991-	375 64 civpol	34 6 civpol	UN Mission for the Referendum in the Western Sahara. Monitor cease-fire
Balkans	UNPF	1992-1996	44,870 750 civpol	2,400 45 civpol	UN Peace Force (UN Protection Force, UN Confidence Restoration Operation)
Cambodia	UNTAC	1992-1993	19,200	240	UN Transitional Authority in Cambodia. Provide communications and logistical support, establish mine awareness and monitor disarmament
Cambodia	CMAC	1992-	1,600	12	Cambodian Mine Action Center
Mozambique	ONUMOZ	1992-1995	7,500	15	UN Operation in Mozambique. Provide security, monitor de-mining and cease-fires
Somalia	UNITAF	1992-1993	37,000	1,410	United Task Force. Distribute relief supplies
Somalia	UNOSOM	1992-	937	12	UN Operation in Somalia.

		1993			Headquarters personnel
South Africa	UNOMSA	1992	60	0	UN Observer Mission in South Africa. Observe pre-election period. (Staffed by UN personnel only)
Georgia	UNOMIG	1993-	135	0	UN Observer Mission in Georgia. Monitor cease-fire and investigate violations
Haiti	UNMIH	1993-1996	6,800 900 civpol	750 100 civpol	UN Mission in Haiti. Implement the Governors Island Agreement
Liberia	UNOMIL	1993-	303	0	UN Observer Mission in Liberia. Monitor implementation of peace agreement
The Netherlands	UN ICTY	1993-	Unknown	2 civpol	UN International Criminal Tribunal for the former Yugoslavia. Assist in preparing cases against people accused of war crimes
Rwanda, Uganda	UNOMUR	1993-1994	100	3	UN Observer Mission Uganda-Rwanda. Verify that military supplies do not cross border into Rwanda
Rwanda	UNAMIR	1993-1996	5,900 90 civpol	430 1 civpol	UN Assistance Mission in Rwanda. Assist interim government with transition measures leading to elections. Commission of inquiry on arms trafficking
Somalia	UNOSOM II	1993-1995	28,000	9	UN Operations in Somalia. Distribute relief supplies
Chad	UNASOG	1994	9	0	UN Aouzou Strip Observer Group. Monitor withdrawal of Libyan administration
Guatemala	MINUGUA	1994-	52 civpol	3 civpol	UN Verification Mission in Guatemala. Verify implementation of human rights agreements and fulfilment of definitive ceasefire.
South Africa	Commonwealth Mission	1994	Unknown	2 civpol	Supported Commonwealth mission
Tadjikistan	UNMOT	1994	17	0	UN Mission in Tadjikistan. Assist implementation of cease-fire
Balkans	UNPREDEP	1995-	1,083	1	UN Preventive Deployment Force
Balkans	IFOR (non-UN)	1996-1997	60,000	1,035	Implementation Force in Bosnia-Herzegovina

Balkans	UNMOP	1996-	27	1	UN Mission of Observers in Prevlaka
Balkans	UNMIBH	1996-	5 2,027 civpol	1 30 civpol	UN Mission in Bosnia-Herzegovina
Balkans	UNMACBH	1996-1997	72	6	UN Mine Action Centre, Bosnia-Herzegovina
Haiti	UNSMIH	1996-1997	1,300 300 civpol	752 100 civpol	UN Support Mission in Haiti
Zaire	MNF (non-UN)	1996	452	452	Multinational Force for Eastern Zaire. Facilitate the return of humanitarian organizations, the effective delivery of aid, and the repatriation of refugees
Balkans	SFOR (non-UN)	1997-	30,000	1,269	NATO's Stabilization Force in Bosnia-Herzegovina
Guatemala	MINUGUA	1997	339	15	UN Verification Mission in Guatemala. Verify implementation of human rights agreements and fulfilment of definitive ceasefire
Haiti	UNTMIH	1997	1,000 250 civpol	650 60 civpol	UN Transition Mission in Haiti
Haiti	MIPONUH	1997-	300 civpol	22 civpol	UN Police Operation in Haiti. Canada also provides 24 police trainers

(Internet document. Available from www.dfait-maeci.gc.ca/peacekeeping/hist-e.asp. Accessed March 3, 2001)

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